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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MADSEN, ROBERT A

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,754

Applicant(s)

BURKE ET AL.

Examiner

Robert Madsen

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 83-86 and 98-113 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 83-86 and 98-113 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/23/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "16" has been used to designate both tumbler and drum assembly and reference character "74" has been used to designate both tumbler drum and rotating drum. Furthermore, there is a statement of "the rotating drum assembly" in line 19 of Page 19 , and it is not clear whether this is "16" or "74".
2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "the rotating drum assembly" as described in the specification. As discussed above, "16" is a drum assembly and "74" is rotating drum. A "rotating drum assembly" is not shown. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 83-86,98-113 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6. Claim 83 recites "rotating the product...in a tumble drum" and "reciprocating the tumble drum linearly". The Examiner cannot locate a disclosure of a tumble drum (e.g. item 74) that rotates and reciprocates linearly.

7. The specification on Page 19 states a "tumble drum" or "rotational drum" is item 74. In view of Figures 2 and 3 and Page 19, frame 70 reciprocates via support 60, and tumbler drum 74 rotates via motor 72. The specification further discloses in lines 17-19 of Page 19: "brackets 78,82 are thus each fixed to the frame 70 with the pivotal connection 76,80 interconnecting the reciprocating supports 60 with the rotational drum assembly". The specification does not describe how item 70 can be "interconnected" with a rotational drum, since, based on the specification, it appears that rotational movement of 70 would break the connection at 78/82 or pivotal connection 76/80. Thus, the specification appears to be non-enabling for item 70 to linearly move the

Art Unit: 1761

rotating tumbler drum 74 as recited in claim 83, without breaking the fixed brackets 78,82.

8. Furthermore, although the specification also states "it should thus be understood that the tray 14...fits over a rotating drum with a slightly larger diameter with the drum 16 both rotating and reciprocating" (Page 25,line 27 to Page 26, line 2), based on the description on Page 19, as well as Figures 2 and 3 as discussed above, the specification is found non-enabling for the limitations of claim 83.

9. Claims 84 and 110 are also non-enabled for the reasons discussed relative to claim 83.

10. For examination purposes, the Examiner will consider the specification to be enabling.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 83 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. The term "slow" in claim 83 is a relative term which renders the claim indefinite. The term "slow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For examination purposes this will be understood to be a speed sufficient to allow for mixing.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 83, 84, 98-101, 104, 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (US 1876224) in view of Pearson(US 3442691).

16.. Harding teaches a rotating a food product, candy, and another product, a seasoning such as sugar, in a tumble drum, a sleeve shaped body, with ribs having first and second surfaces and a candy tray and slowly reciprocating the *tray* in an up and down motion to sufficiently coat the candy with sugar as well as slide the candy along the drum and discharge the candy from the drum (Figures, Page 1, lines 1-74, Page 1, line 98 to Page 2, line 26) . However Harding is silent in teaching the *drum* is reciprocated in a linear forward/backward manner, the drum includes a plastic liner,

17. Pearson also teaches coating utilizing a tumble drum. Pearson teaches rotating a product and mixing it with another product in a tumble drum wherein reciprocating drum in a linear forward backward manner will reduce coating time, as well as improve the efficiency in cleaning the drum. The speed at which the reciprocating is done depends on the size of the objects being coated , and smaller items require a slower speed. Pearson also teaches providing a chemically resistant plastic liner, such as neoprene (Column 1, lines 15-26,column 2, lines 9-49,Column 3, lines 28-40, Column 5, lines 1-49).

Art Unit: 1761

18. Therefore it would have been obvious to modify Harding such that the *drum* would reciprocate back and forth in a linear manner and to thus secure the tray to the drum since Harding teaches the product is in the tray and Pearson teaches rotating a product and mixing it with another product in a tumble drum with the drum reciprocating in a linear forward backward manner will not only reduce coating time but improve the efficiency in cleaning the drum. It would have been further obvious to select any particular speed for the reciprocating motion since Pearson teaches the reciprocating speed selected depends on the size of the objects being coated. It also would have been further obvious to include a plastic liner since Pearson teaching including a plastic liner will provide chemical resistance and this would protect the interior surface from any industrial cleaners.

19. Claims 85,102,103,105,106,109,111,113, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (US 1876224) in view of Pearson(US 3442691) as applied to claims 83, 84, 98-101,104,108, above, further in view of Leverenz (US 4270486).

20. Harding teaches conveying the product via the tray, but is silent in teaching sensing an upper level of product in the product tray and producing a feed signal functionally related to the volume of product conveyed , driving the tray to respond to the feed signal.

21. Leverenz also teaches a process for coating a food product with a seasoning in a tumble drum. However, Leverenz teaches an automated coating process in order to

Art Unit: 1761

assure a uniform coating, and Leverenz does so by dispensing metered quantities of a seasoning in response to a measured upper level of food product entering the system. Leverenz further teaches controlling the rate delivering the food products to the coating process with this measured upper level of the food products, producing a product feed signal related to the volume of the product being conveyed and driving the delivery of the food product in response to the feed signal, which also adjust the feed rate in repose to the feed rate signal (Abstract, Column 1, line 44 to Column 2, line 40, Column 3, lines 20-34, Column 4, lines 9-34, Column 6, line 42 to Column 7, line 24).

22. Therefore, it would have been obvious to modify Harding and dispense metered quantities of a seasoning in response to a measured upper level of food product entering the system, controlling the rate delivering the food products to the coating process with this measured upper level of the food products, producing a product feed signal related to the volume of the product being conveyed and driving the delivery of the food product in response to the feed signal, which also adjust the feed rate in repose to the feed rate signal, since Leverenz teaches utilizing such control methods will help one attain uniform coating of a food with a seasoning with a tumble drum.

23. Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (US 1876224) in view of Pearson(US 3442691) as applied to claims 83, 84, 98-101,104,108, above, further in view of Behnke et al. (US 5876775)

24. Harding teaches food products coated with sugar, but is silent in teaching spray the food product with a liquid. Behnke et al. teach applying sugar solution via spraying

Art Unit: 1761

in a tumble drum (Abstract, Column 1). Therefore, to spray the coating would have been obvious depending on the desired type of sweetener desired such as sugar or sugar solution, since Behnke et al. teach tumble drums can be used in combination with spray sugar solution for coating.

25. Claim 107 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (US 1876224) in view of Pearson (US 3442691) as applied to claims 83, 84, 98-101, 104, 108, above, further in view of Groves (WO9528088)

26. Harding is silent in teaching controlling the process by a computer that contains parameters inputted by an operator. Groves teaches using a computer as the central control processor for a tumble drum (Abstract). Therefore, it would have been obvious to control the process by a computer that contains parameters inputted by an operator, since this would have provided on central process control center, and thus allow one to manipulate the various stages of the process from one central location.

27. Claim 112 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harding (US 1876224) in view of Pearson (US 3442691) further in view of Leverenz (US 4270486) as applied to claims 85, 102, 103, 105, 106, 109, 111, and 113 above, further in view of Behnke et al. (US 5876775).

28. Harding teaches food products coated with sugar, but is silent in teaching spray the food product with a liquid. Behnke et al. teach applying sugar solution via spraying in a tumble drum (Abstract, Column 1). Therefore, to spray the coating would have

Art Unit: 1761

been obvious depending on the desired type of sweetener desired such as sugar or sugar solution, since Behnke et al. teach tumble drums can be used in combination with spray sugar solution for coating.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. Faerber (US 2787978), Ackles (US 3102052), Eisenberg (US 3905326), Marshall et al. (US 5846324), teach seasoning/coating food with a drum.

31. Higashimoto (US 5323694), Beckwith (US 247756), Bishop (US 4750840), Heine (US 2470100), and Muzzio et al (US 5884999) teach tumble drums that also capable of reciprocating motion.

32. Sayer (US 2294244) teaches a reciprocating tumble drum.

33. Applicant's related Issued Patents : 6588363 B1, 6769381 B2, and 6840664 B2 .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 8:00AM-4:30PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen
Examiner
Art Unit 1761



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